

111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 • FAX: (603) 429-8496 www.amrolabs.com

December 04, 2007

### ANALYTICAL TEST RESULTS

Raymond Siegener GEI Consultants, Inc. 400 Unicorn Park Drive Woburn, MA 01801

TEL: (781) 721-4098 FAX: (781) 721-4073

Subject: 00291-4 DCR Canton Airport

Workorder No.: 0711087

Dear Raymond Siegener:

AMRO Environmental Laboratories Corp. received 1 sample on 11/20/07 for the analyses presented in the following report.

AMRO is accredited in accordance with NELAC and certifies that these test results meet all the requirements of NELAC, where applicable, unless otherwise noted in the case narrative.

The enclosed Sample Receipt Checklist details the condition of your sample(s) upon receipt. Please be advised that any unused sample volume and sample extracts will be stored for a period of 60 days from sample receipt date (90 days for samples from New York). After this time, AMRO will properly dispose of the remaining sample(s). If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This report consists of a total of  $\frac{1}{2}$  pages. This letter is an integral part of your data report. All results in this project relate only to the sample(s) as received by the laboratory and documented in the Chain-of-Custody. This report shall not be reproduced except in full, without the written approval of the laboratory. If you have any questions regarding this project in the future, please refer to the Workorder Number above.

Sincerely,

Nancy Stewart Vice President

State Certifications: NH (NELAC): 1001, MA: M-NH012, CT: PH-0758, NY: 11278 (NELAC), ME: NH012 and

1001, NJ: NH125, RI: 00105, U.S. Army Corps of Engineers (USACE), Naval Facilities

Engineering Service Center (NFESC).

Hard copy of the State Certification is available upon request.

Date: 29-Nov-07

CLIENT:

GEI Consultants, Inc.

Project:

00291-4 DCR Canton Airport

Lab Order:

0711087

Date Received:

11/20/07

Work Order Sample Summary

Lab Sample ID

**Client Sample ID** 

**Collection Date** 

**Collection Time** 

0711087-01A

002914-B105D (MW)

11/19/07

11:46 AM

Lab Order:	0711087				) } }	   	•
Client:	GEI Consultants, Inc.				A E C E C E C E C E C E C E C E C E C E	E LOKE	
Project:	00291-4 DCR Canton Airport	on Airport					
Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name		Analysis Date	
				Preparatory Test Name	Prep Date	Batch ID	TCLP Date
0711087-01A	002914-B105D (MW)	11/19/07 11:46:00 AM	Groundwater	EPA 8082 PCBS IN WATER		11/27/07	
				EPA 3510 AQPREP SEP FUNNEL: PCB	11/26/07	17878	
CAMP COMMENT OF THE PARTY OF TH	The state of the s					-	

Chain-of-Custody Record	ecord			Laboratory:		AMRO			Laboratory Job # (Lab use only)		2801120
					Project	Project Information	ion				
	Project N	Project Name: DCR Canton Airport	nton Airpor	اب		<u>α</u>	Project Location:		Canton, MA		Page_1_of_1_
Consultants	Project N	Project Number: 00291-4	4-1			۵.	Project Manager:		Saskia Oosting	Ö	
400 Unicorn Park Drive Woburn, MA 01801	Send Report to:	ort to:	Saskia Oos	Oosting					Preservative		Sample Handling
PH: 781.721.4000 FX: 781.721.4073	Send EDE	Send EDD to: labdata@geiconsultants.com	igeiconsulta	ints.com					Analysis		Samples Field Filtered
MCP PRESUMPTIVE CERTAINTY REQUIRED	Y REQUIRED -	YES.	ON				grap denggan degan ak sari kahandad				YES NO NA
If Yes, Are MCP Analytical Methods Required?	ds Required?		YES	ON ON	N AN			-	and the second second		Sampled Shipped
If Yes, Are Drinking Water Samples Submitted?	es Submitted?		YES	9	NA A	<del>Sant Activities (</del>			• <del>• • • • • • • • • • • • • • • • • • </del>		With Ice
If Yes, Have You Met Minimum Field QC Requirements?	eld QC Requireme	ents?	YES	o N	AN				<del></del>		YES NO
Lab Sample GEI San	GEI Sample ID	Collection	lion Time	Matrix	No. of Sa	Sampler(s) Initials	LCB <sup>2</sup>		····		Sample Specific Remarks
002914-B10	IW)	11/19/2007	11:46		-	АН	×				
			-								nterconnection of the second
4											
MCP Level Needed: GEI requires the most stringent Method 1 MCP standard be met for all analytes wheneverhossible.	s the most stringen	nt Method 1 MC	P standard	be met for	all analyt	sa		Turnaro (Busine	Turnaround Time (Business davs):	Before su	Before submitting rush
Relinquished by sampler, (signature)	Date :	Time:   (   ) 0	Received by: (signature)	ignature)			Normal	X	Other	notify the	notify the laboratory to confirm
1. MOREN MAINER		Time.	- IT	hv. (signal right)			10-Day	, ,	7-Day	ב פ פ	A I Call De acilleveu.
Selli Husinga on (signature)	40/2/11/	1050			1		5-Day		3-Day nal Requirer	3-DayAdditional Requirements/Comments/Remarks:	is/Remarks:
elinquished by: (sig	Date :	Time:	s eq	by: (signature)		<u>a</u>	ricing pe	r "AMRC	Environmen	Pricing per "AMRO Environmental Laboratories Corporation	orporation,
3.	7		3.			<u> </u>	rice Bool	k 2006 fc	r GEI" DCR C	Price Book 2006 for GEI" DCR Contract Rates	
Relinquished by: (signature)	Date (1/20/0)	Time. $7\lambda3\delta$	Received by: (s	Received by: (signature) 4. $C$ $C$ $C$ $d$ $d$ $d$ $d$	7						
				n March and a second a second and a second a		orang-commonweal-free	- Angers - A		7/1/0/1/2014/1/0/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/		THT9/2007

# AMRO Environmental Laboratories Corporation

# SAMPLE RECEIPT CHECKLIST

111 Herrick Street Merrimack, NH 03054

Client: GEI CONSULTANTS	11100			(603) 424-2022
	_AMRO I			0111081
Project Name: DCR CANTON HIRFORT  Ship via: (circle one) Fed Ex., UPS (AMRO Courier,)	_ Date Red		******	11-20-07
Hand Del., Other Courier, Other:	Date Du	e:	************	11-29-07
Traine Det., Other Counter, Other.		RMA Process in marine type of the contraction of		
Items to be Checked Upon Receipt	Yes	T N .	T NA	
Army Samples received in individual plastic bags?	168	No	NA	Comments
	-		V	
2. Custody Seals present?	·		1	
3. Custody Seals Intact?			IV,	
4. Air Bill included in folder if received?	-		1	
5. Is COC included with samples?	<u>                                     </u>			
6. Is COC signed and dated by client?	V			
7. Laboratory receipt temperature. TEMP = 5			<u> </u>	
Samples rec. with ice vice packs neither			<u> </u>	
8. Were samples received the same day they were sampled?		1		
Is client temperature 4°C ± 2°C?				
If no obtain authorization from the client for the analyses.				
Client authorization from: Date: Obtained by:	•			
9. Is the COC filled out correctly and completely?	V			
10. Does the info on the COC match the samples?	V			
11. Were samples rec. within holding time?	V			
12. Were all samples properly labeled?	V		1	
13. Were all samples properly preserved?	1			
14. Were proper sample containers used?	11			
15. Were all samples received intact? (none broken or leaking)	1		<del> </del>	
16. Were VOA vials rec. with no air bubbles?			1	
17. Were the sample volumes sufficient for requested analysis?				· · · · · · · · · · · · · · · · · · ·
18. Were all samples received?				
19. VPH and VOA Soils only:				
Sampling Method VPH (circle one): M=Methanol, E=EnCore (air-tight container)	L1			
Sampling Method VOA (circle one): M=Methanol, SB=Sodium Bisulfate, E=EnCo	re R-Rulk	•		
If M or SB:	C, D-Daix			
Does preservative cover the soil?				
If NO then client must be faxed.				
Does preservation level come close to the fill line on the vial?				
If NO then client must be faxed.				
Were vials provided by AMRO?	<del>  </del>			
If NO then weights MUST be obtained	from alian			I .
Was dry weight aliquot provided?	Trom chei	11		T
If NO then fax client and inform the V	DA Jab AS	SA P		
20. Subcontracted Samples:	I III KS	MI.		T
What samples sent:				
Where sent:	<b> </b>			
Date:				
Analysis: TAT:	<u> </u>			
			1-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
21. Information entered into:				
Internal Tracking Log?				
Dry Weight Log?			2/	
Client Log?				
Composite Log?			/	
Filtration Log?			<i>∨</i>	
Received By: CC Date: //- 20-07 Logged in By:	ccm		Date:	11-20-07 11-21-07
Labeled By: CC Date: 11-20-07 Checked By:		5	Date:	11-21-07'

# AMRO Environmental Laboratories Corporation

111 Herrick Street Merrimack, NH 03054 (603) 424-2022

Please Ci	rcle	if:
Sample=	Soil	
Sampla-	Was	

pH Checked By:

AMRO ID: 07// 087

OIA	Analysis	Volume Sample	Preserv. Listed	рН*	Acceptable? Y or N	Preserv. Added by AMRO	Solution ID # of Preserv.	Volume Preservative Added	Final adjusted pH	adjuste pH (aft 16 hour
	PCB	2-1LA	***************************************	7	У-		·	·		
		<u> </u>			/		_			
									An Albertain and a special control of the second control of the se	
					·					***************************************
								•		
							,			
			•							
										***************************************
				·						
									~	
								***************************************		
	,									
										***************************************
										***************************************
								·		***************************************
										National Parkets and Control of the
f the laborato	ry preserves	the drink	ing water s	ample (	s) for EPA Met	hod 200 seri	es, sample (e) el	ould he held at	least	

pH adjusted (16hrs) By:\_\_\_\_\_

**Date:** 04-Dec-07

CLIENT:

GEI Consultants, Inc.

Project:

00291-4 DCR Canton Airport

Lab Order:

0711087

**CASE NARRATIVE** 

### GC/ECD-PCB:

1. No QC deviations were observed.

	MADEP MCP	Analytical Metho	od Report Cert	ification Form	
Laboratory Name: AN	MRO Environmenta	al Laboratories, Inc	. Project Nun	nber: 0711087	
Project Location:	00291-4 DCR Ca	anton Airport	MADEP RT	N: 1	
0711087-01					
Sample Matrices:	Ground Water	Soil / Sediment	Drinking Wat	er OtherMatr	ix
MCP SW-846 Methods Used	8260B	8151A	8330	6010B	7470A/1A
As specified in MADEP Compendium of Analytical Methods.	8082 🗸	8021B	EPH []	7000S <sup>3</sup>	Other
(check all that apply)	2 M - SW-846 Met 3 S SW-846 Meth	thod 9014 or MADI nods 7000 Series L	EP Physiologicallist individual meth	y Available Cyanide nod analyte.	(PAC) Method
An affirmative	response to ques	stions A, B, C and	D is required for	r "Presumptive Ce	rtainty" status
A Were all samples	s received by the I	aboratory in a conc documentation for	lition consistent w		● Yes ○ No ¹
this report follow	ed, including the re	ed for the specified equirement to note performance stand	and discuss in a	narrative QC	● Yes ○ No ¹
Presumptive Cer	tainty, as describe	n this report meet a ed in Section 2.0 of atrol Guidelines for	the MADEP docu	iment CAM VII A,	• Yes O No 1
D <u>VPH and EPH m</u> modifications, as	ethods only: specified in Secti	Was the VPH or E on 11.3?	PH method run w	rithout significant	Yes No W/A
A respon	se to questions I	E and F below is r	equired for "Pre	sumptive Certaint	/" status
E Were all QC perl achieved?	formance standard	ds and recommend	ations for the spe	cified methods	● Yes ○ No 1
F Were results for reported?	all analyte-list con	npounds / elements	for the specified	method(s)	● Yes ○ No ¹
<sup>1</sup> All NO an	swers must be add	dressed in an attac	hed Environment	al Laboratory case	narrative.
l, the undersigned, a those responsible for best of my knowled	or obtaining the i	nformation, the m	aterial contained	, based upon my p d in this analytical	ersonal inqury of report is, to the
Signature: $\frac{\int_{\alpha} c}{\int_{\alpha} c}$	la Bent Ua Bent	han-	Position:	Lab QC 12/4/07	Manager

### DATA COMMENT PAGE

### **Organic Data Qualifiers**

- ND Indicates compound was analyzed for, but not detected at or above the reporting limit.
- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
- H Method prescribed holding time exceeded.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- R RPD outside accepted recovery limits
- RL Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
- S Spike Recovery outside accepted recovery limits.
- # See Case Narrative

### Micro Data Qualifiers

TNTC Too numerous to count

### **Inorganic Data Qualifiers**

ND or U Indicates element was analyzed for, but not detected at or above the reporting limit.

- Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
- H Indicates analytical holding time exceedance.
- B Indicates that the analyte is found in the associated blank, as well as in the sample.
- MSA Indicates value determined by the Method of Standard Addition
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- R RPD outside accepted recovery limits
- RL Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
- S Spike Recovery outside accepted recovery limits.
- W Post-digestion spike for Furnace AA analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- \* Duplicate analysis not within control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
- # See Case Narrative

### Report Comments:

- 1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
- 2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

Date: 29-Nov-07

CLIENT: Lab Order: GEI Consultants, Inc.

0711087

00291-4 DCR Canton Airport

Project: Lab ID:

0711087-01A

Client Sample ID: 002914-B105D (MW)

**Collection Date:** 11/19/07 11:46:00 AM

Matrix: GROUNDWATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS	BY MCP METH	SW8082	alakasi kannon oron oron, professioninin kalanda alakasi alah da pada da pada da pada da pada da pada da pada d		Analyst: FQ
Aroclor 1262	ND	0.20	μg/L	· · <b>1</b>	11/27/07 1:31:00 AM
Aroclor 1268	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1016	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1221	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1232	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1242	, ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1248	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1254	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Aroclor 1260	ND	0.20	μg/L	1	11/27/07 1:31:00 AM
Surr: Decachlorobiphenyl	91.6	30-119	%REC	1	11/27/07 1:31:00 AM
Surr: Tetrachloro-m-xylene	82.2	34-113	%REC	1	11/27/07 1:31:00 AM

AMRO Environmental Laboratories Corp.

CLIENT: Work Order: Project:	GEI Cons 0711087 00291-4	GEI Consultants, Inc. 0711087 00291-4 DCR Canton Airport							SOCIOLO DE CONTRACTOR DE CONTR	QC SUMMARY REPORT Method Blank	MARY	Y REPORT Method Blank	
Sample ID: MB-17878 Client ID:	7878	Batch ID: 17878	Test Code: SW8082 Run ID: GC-ELVI	SW8082 Units GC-ELVIS_071126A	Units: µg/L			Analysis Da SeqNo:	ate: 11/27/2 647658	Analysis Date: 11/27/2007 12:12:00 A SeqNo: 647658	Prep Date	Prep Date: 11/26/2007	
Analyte	is a particular to	QC Sample Result	R	Units	QC Spike Original Sample Amount Result	al Sample ' Result %	REC	Sample ' Result %REC LowLimit HighLimit	1	Original Sample or MS Result	%RPD	RPDLimit	Önç
Aroclor 1262		QN	0.20	µg/L									
Aroclor 1268		QN	0.20	µg/L									
Aroclor 1016		Q	0.20	µg/L									
Aroclor 1221		QN	0.20	µg/L									
Aroclor 1232		Q	0.20	µg/L									
Aroclor 1242		Q	0.20	µg/L	,								
Aroclor 1248		Q	0.20	µg/L									
Aroclor 1254		QN	0.20	hg/L									
Aroclor 1260		QN	0.20	µg/L									
Surr: Decachlorobiphenyl	obiphenyl	0.06898	0	hg/L	0.064	0	108	30	119	0			
Surr: Tetrachloro-m-xylene	o-m-xylene	0.05123	0	hg/L	0.064	0	80	34	113	0			

B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate. J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

NA - Not applicable where J values or ND results occur

AMRO Environmental Laboratories Corp.

CLIENT:	GEI Cons	GEI Consultants, Inc.								OC SIMMARY REPORT	MARV	E P	
Work Order: 0	0711087										H WESTEAT		<b>₹</b>
Project: 0	0291-4	00291-4 DCR Canton Airport								Lab	oratory (	Laboratory Control Spike	ıke
Sample ID: LCS-17878	8	Batch ID: 17878	Test Code	Test Code: SW8082	Units: µg/L			Analysis D	ate: 11/27/2	Analysis Date: 11/27/2007 12:39:00 A	Prep Date	Prep Date: 11/26/2007	
Client ID.			Run ID:	GC-ELVIS_071126A	071126A			SeqNo:	647659				
		QC Sample			QC Spike Original Sample	al Sample			U	Original Sample			
Analyte		Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Que
Aroclor 1016		3.303	0.20	µg/L	4	0	82.6	51	125	0			
Aroclor 1260		3.666	0.20	hg/L	4	0	91.6	20	133	0			
Surr: Decachlorobiphenyl	henyl	0.07043	0	hg/L	0.064	0	110	30	119	0			
Surr: Tetrachloro-m-xylene	-xylene	0.06022	0	hg/L	0.064	0	94.1	34	113	0			
Sample ID: LCSD-17878	178	Batch ID: 17878	Test Code	Test Code: SW8082	Units: µg/L			Analysis D	ate: 11/27/20	Analysis Date: 11/27/2007 1:05:00 AM	Prep Date	Prep Date: 11/26/2007	
Client ID:			Run ID:	GC-ELVIS_071126A	_071126A			SeqNo:	647660				
		QC Sample		Ü	QC Spike Original Sample	al Sample			O	Original Sample			
Analyte		Result	R	Units	Amount		%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qué
Aroclor 1016		3.754	0.20	µg/L	4	0	93.9	51	125	3.303	12.8	20	
Aroclor 1260		4.085	0.20	µg/L	4	0	102	20	133	3.666	10.8	20	
Surr: Decachlorobiphenyl	henyl	0.07287	0	hg/L	0.064	0	114	30	119	0	0	0	
Surr: Tetrachloro-m-xylene	-xylene	0.06235	0	µg/L	0.064	0	97.4	. 34	113	0	0	0	

NA - Not applicable where J values or ND results occur B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate. J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers: